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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,188	07/23/2001	Jeffrey C. Hessenberger	066042-9262-00	2352

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03/06/2003

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EXAMINER

GONZALEZ, JULIO C.

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,188

Applicant(s)

HESSENBERGER ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 19-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

- I. Claims 1-11, drawn to field assembly, classified in class 310, subclass 179.
- II. Claims 12-18, drawn to field assembly, classified in class 310, subclass 254.
- III. Claims 19-25, drawn to method of making a field assembly, classified in class 29, subclass 596.
- IV. Claim 26, drawn to method of assembling an electric motor, classified in class 29, subclass 594.
- V. Claims 27-38, drawn to field assembly for an electric motor, classified in class 310, subclass 47.

2. Applicant's election with traverse of election/restriction in Paper No. 3 is acknowledged. The traversal is on the ground(s) that restriction was improper since the claims cover the same ground of limitation and search would not be a burden on the examiner. This is not found persuasive because In this case

invention III (claim 19-25) requires that the first lead is connected to the first terminal and the second lead be connected to the second terminal assembly and connecting the first lead *preceding* the winding act and connecting the second lead *following* the winding act. Such specific method of assembling an apparatus is not required by motors or by invention II as disclosed. There are other ways of wounding the coil onto the stator core and it is not necessary for Invention I to follow the specific method guide lines disclose in Invention III.

Due to the request of the Applicant's representative, the Office Action will consider claims 1-18, which cover Invention I and Invention II.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the claim discloses that the winding is wound "in one of the first direction and second direction". From the claim it is not clear if the winding is wound only on the first direction, second direction. Is it both directions? What is meant by "one of the first and second direction"?

In claim 4, the claim discloses that the winding, in the first direction, is wound on the first and second post; however, in claim 5, the claim discloses that in the first direction, the winding is NOT wound on the first and second post. Which one is it?

Also, in claim 6, the claim discloses that the winding, in the second direction, is wound on the first and second post (like claim 4). What is the difference between the first direction and second direction? Is the winding been wound in the same manner in both directions? What is meant by first and second direction? Are the first and second direction implemented at the same time on the stator of the motor?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman in view of Luciani (US Patent No 5,341,997).

Newman discloses a field assembly for an electric motor having a field core 12, a winding support structure 18, a wire redirection structure 48 which is supported by the field core 12, winding 22 wound on the winding support 18 (see figure 1). Also, Newman discloses implicitly that some of the winding may be wound on the wire redirection structure 48 (see figures 2, 4, 5). However, Newman does not disclose explicitly having a redirection structure with posts wherein the winding is wound.

On the other hand, Luciani discloses for the purpose of winding simultaneously two wires of the stator pole without damaging the wires or insulation, a field assembly for an electric motor having a wire redirection structure wherein the field winding (wires 31) is wound (see figure 5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a field assembly for an electric motor as disclosed by Newman and to modify the invention by explicitly disclosing a wire redirection structure for the purpose of winding simultaneously two wires of the stator pole without damaging the wires or insulation as disclosed by Luciani.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman and Luciani as applied to claim 1 above, and further in view of Sun.

The combined field assembly discloses all of the elements above. However, the combined field assembly does not disclose an insulated terminal plate.

On the other hand, Sun discloses for the purpose of enhancing the efficiency of electric motors, a terminal plate 216a connected to the field core (see figure 4) wherein the terminal plate 216 is formed of insulated material

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined field assembly for an electric motor as disclosed above and to modify the invention by using an insulated terminal plate for the purpose of enhancing the efficiency of electric motors as disclosed by Sun.

7. Claims 5, 6, 10, 11, 12, 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman and Luciani as applied to claim 1 above, and further in view of Luciani et al (US Patent No 5,392,506).

The combined field assembly discloses all of the elements above. However, the combined field assembly does not disclose that the winding is not wound on a first and second post of a wire structure.

On the other hand, Luciani et al discloses for the purpose of providing effective connections of coils on a stator terminal, a stator for an electric machine having winding and a wire redirection structure wherein 40A wherein the winding is not wound on a first and second post (see bottom of stator 22 in figure 1 and figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined field assembly for an electric motor as disclosed above and to modify the invention by not wounding winding on a wire redirection structure for the purpose of providing effective connections of coils on a stator terminal as disclosed by Luciani et al.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani, Newman and Luciani et al as applied to claim 12 above, and further in view of Sun.

The combined field assembly discloses all of the elements above. However, the combined field assembly does not disclose an insulated terminal plate.

On the other hand, Sun discloses for the purpose of enhancing the efficiency of electric motors, a terminal plate 216a connected to the field core (see figure 4) wherein the terminal plate 216 is formed of insulated material

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined field assembly for an electric motor as disclosed above and to modify the invention by using an insulated terminal plate for the purpose of enhancing the efficiency of electric motors as disclosed by Sun.

Allowable Subject Matter

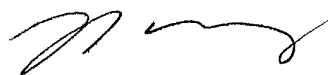
9. Claims 7-9, 14 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
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Jcg

February 28, 2003